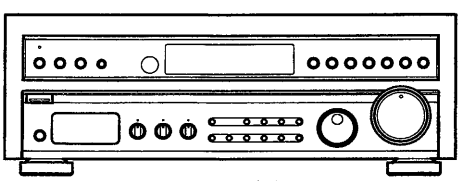
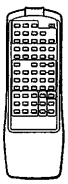
AUDIO/VIDEO STEREO RECEIVER

Operating Instructions

VSX-708RDS





Pioneer

IMPORTANT

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However the method of connecting and operating the unit is the same.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

This product complies with the Low Voltage Directive (73/23/EEC), EMC Directives (89/336/EEC, 92/31/EEC) and CE Marking Directive (93/68/EEC).

VENTILATION

- When installing this unit, make sure to leave space around the unit for ventilation to improve heat radiation (at least 60 cm at top, 10 cm at rear, and 30 cm at each side). If not enough space is provided between the unit and walls or other equipment, heat will build up inside, interfering with performance or causing malfunctions.
- Do not place on a thick carpet, bed, sofa or fabric having a thick pile. Do not cover with fabric or other covering.
  Anything that blocks ventilation will cause internal temperature to rise, which may lead to breakdown or fire hazard.

FEATURES

□ DOLBY PRO LOGIC COMPATIBLE

Best suited for playing back movies and music by reproducing surround effects.

□ 60 W 5 ch EQUAL POWER DISCRETE AMPLIFIER

5 ch equal power discrete amplifier which plays back the high quality effects of Dolby Pro Logic.

□ 5-D THEATER

The 5-D THEATER function provides clear dynamic sound effects by outputting audio signals through the rear channel to simulate stereo sound.

□ 5.1-CHANNEL INPUT

Features input terminals for center, surround L, R, and sub-woofer (LFE) channels, thus allowing the connection of Dolby Digital decoder or DVD player provided with 5.1-channel output.

□ TWO SFC MODES

Reproduces STUDIO and ARENA surround effects.

□ RDS (Radio Data System)

FM broadcast stations display transmitting information.

□ ENERGY-SAVING DESIGN

- This unit is designed to use minimal electricity when power is switched OFF (during Standby).
- Regarding the value of the power consumption in standby mode, refer to "Specifications" on page 39.

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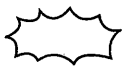
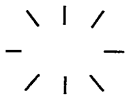
READING THIS MANUAL

■Meaning of Marks

Provides detailed precautions and advice on operations, etc.



Indicates that buttons or displays are blinking.



Indicates that buttons or displays are lit.

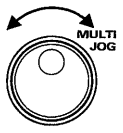
Indicates that display changes automatically.

■Meaning of Illustrations

The following describes illustrations on pressing buttons.

Means to press the ⏻ RECEIVER button (of the remote control unit).

Means to press the ENTER button (of the main unit).

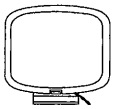


Means to rotate (adjust) the MULTI JOG.

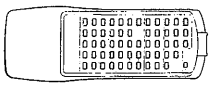
1. BEFORE USE

CHECKING ACCESSORIES

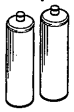
FM antenna



AM loop antenna



Remote control unit

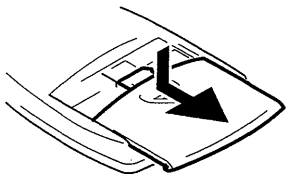


Dry cell battery (size "AA" IEC R6) x 2

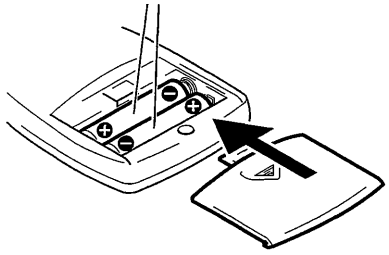
REMOTE CONTROL UNIT

Loading remote control batteries

1.



2. Dry cell batteries (size "AA" IEC R6)

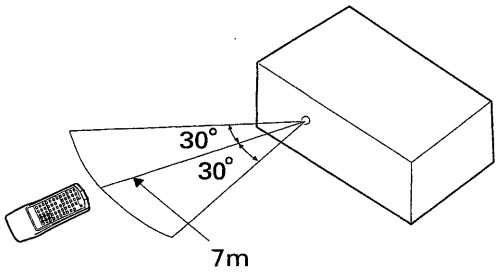


CAUTIONS

Incorrect use of batteries may result in such hazards as leakage and bursting. Observe the following precautions.

- Never use new and old batteries together.
- Insert the plus and minus sides of the batteries properly according to the marks in the battery case.
- Batteries with the same shape may have different voltages. Do not use different batteries together.

Operating range of the remote control unit

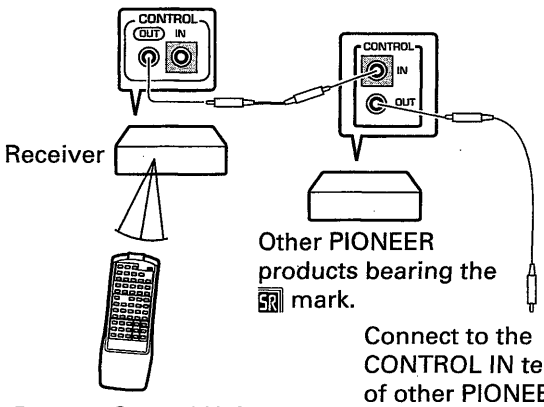


memo

- The remote control unit may not work if there is an obstacle between the remote control unit and this unit, or if the remote control unit is not directed towards the remote sensor of the main unit at the correct angle.
- The remote control unit may not work properly if strong light such as direct sunlight or fluorescent light is shining onto the main unit's remote sensor.
- The remote control unit may not work properly when this unit is used near devices emitting infrared rays, or when remote control units of other devices which use infrared rays are used.
  On the other hand, the use of this remote control unit may cause other devices to work improperly.
- When the operating range of this remote control unit becomes too short, replace the batteries.

Operating the remote control unit

By connecting a control cord (optional), other PIONEER products can be operated using this remote control unit via this unit. Direct the remote control unit towards the remote sensor of this unit.
The remote control signals are received by the remote sensor of this unit, and sent to the other devices via the CONTROL OUT terminal.



memo

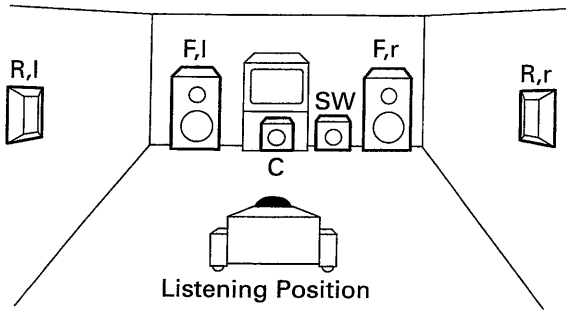
When a control cable is connected to this unit's CONTROL IN jack, direct control of the Receiver with the remote control unit is not possible.

INSTALLATION

Installing speakers

To achieve the best surround effects, install speakers as shown in the following figure.

Installation Example



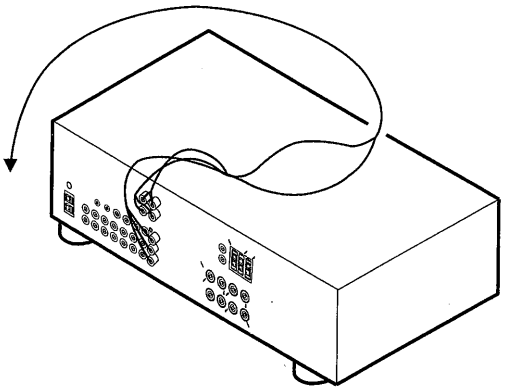
* In the above figure, F indicates front speakers, R indicates rear speakers, C indicates center speaker, SW indicates sub woofer, r indicates right, and l indicates left.

memo

- If installing the rear speakers far away from the front and center speakers, surround effects cannot be fully achieved.
- Installing speakers near the TV may cause interference such as the TV color to change. In such cases, use magnetically shielded speakers or install the speakers away from the TV.
- Install the left and right speakers at equal distance from the TV.
- Install the center speaker above or below the TV so that the sound of the center channel is localized at the TV screen.
- It is recommended to install the rear speakers slightly above ear level.

CAUTION:
When installing the center speaker on top of the TV, be sure to secure it with tape or some other suitable means.
Otherwise, the speaker may fall from the TV due to external shocks such as earthquakes, and it may lead to endangering those nearby or damaging the speaker.

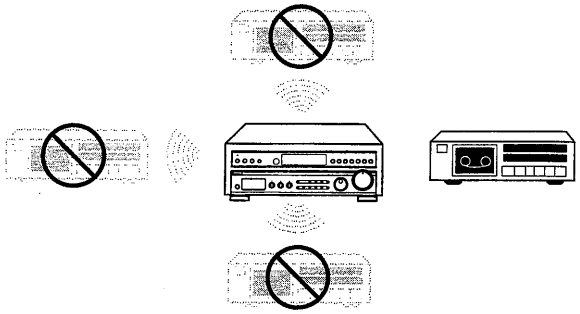
Styling the Connected Cable



Leaving cables in a loop on the unit as shown in the figure above may cause humming noise due to leakage of the transformer to be heard from the speakers. Avoid such layout of the cables.

Placement of the cassette deck

We recommend placing your cassette deck(s) to the right of the receiver. Placing the cassette deck(s) in other positions may affect playback and recording.

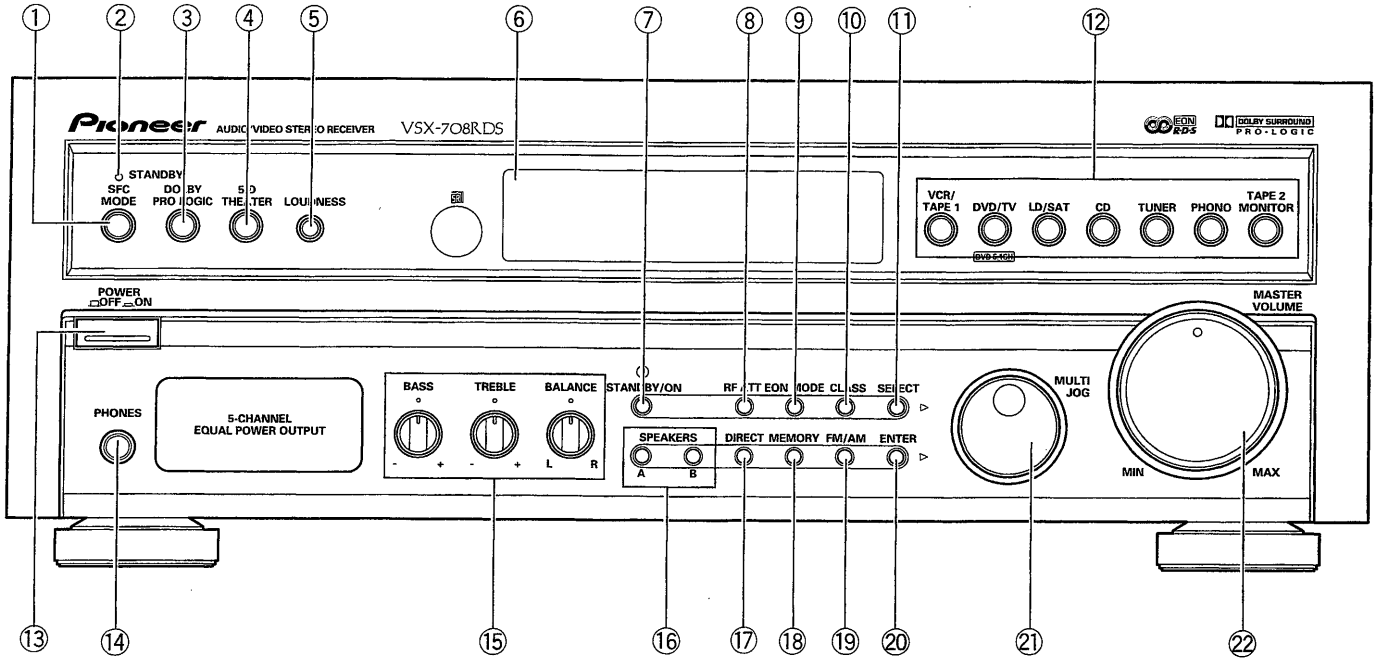


2. NAMES AND CONNECTIONS OF PARTS

NAMES OF PARTS

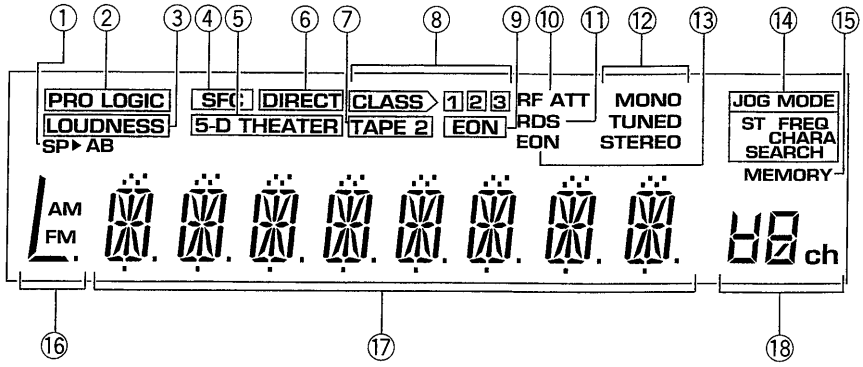
* The size of characters shown in the figure may differ from that on the actual product.

Front panel



① **SFC MODE button (P.24)**
② **STANDBY indicator**
③ **DOLBY PRO LOGIC button**
Switches DOLBY PRO LOGIC SURROUND on and off.
④ **5-D THEATER button (P.26)**
⑤ **LOUDNESS button**
Press this button when the volume is low to raise the low and high range levels so that the sound can be heard more easily.
⑥ **Display**
⑦ **POWER STANDBY/ON button**
⑧ **RF ATT button**
Set this button to on when receiving strong FM signals (nearby stations) to reduce sound distortion. Normally, this button should be set off. This button does not affect AM reception.
⑨ **EON MODE button (P.32)**
⑩ **CLASS button (P.17)**
⑪ **SELECT button (P.16~)**
Use to switch the control of the MULTI JOG between station mode and frequency mode when operating the tuner.
⑫ **Function buttons (P.16~)**
⑬ **POWER switch**
⑭ **PHONES jack (Headphone terminal)**
⑮ **TONE and BALANCE controls**
Use to adjust tone and volume balance.
⑯ **SPEAKERS A, B buttons**
ON/OFF switches for the A and B speaker systems.
⑰ **DIRECT button**
Use to play back sound without going through the tone and balance control circuits. DOLBY MODE, DSP MODE and LOUDNESS also turn off.
⑱ **MEMORY button (P.17)**
⑲ **FM/AM button (P.16)**
Use to switch the FM/AM frequency band reception.
⑳ **ENTER button (P.17~)**
㉑ **MULTI JOG (P.16~)**
㉒ **MASTER VOLUME**

Display



① **Speakers A, B indicator**
The indicator of the speaker system (A, B) selected will light.

② **PRO LOGIC indicator**
Lights when Dolby Pro Logic is selected.

③ **LOUDNESS indicator**
Lights when LOUDNESS is ON.

④ **SFC indicator**
Lights when the SFC mode is selected.

⑤ **5-D THEATER indicator**
Lights in the 5-D THEATER mode.

⑥ **DIRECT indicator**
Lights when DIRECT is ON.

⑦ **TAPE 2 indicator**
Lights when TAPE 2 MONITOR is ON.

⑧ **CLASS 1, 2, 3 indicators**
The indicator of the class number selected lights.

⑨ **EON MODE indicator**
Lights when EON MODE is ON.

⑩ **RF ATT indicator**

⑪ **RDS indicator**
Lights when a RDS broadcast is received.

⑫ **TUNER indicator**

MONO:
Lights when the monaural mode is set using the MPX MODE button.

TUNED:
Lights when broadcasts are being received.

STEREO:
Lights when stereo broadcasts are received during auto stereo mode.

⑬ **EON indicator**
Lights when a station broadcasting EON information is received.

⑭ **JOG MODE indicator**

ST:
Lights when the station mode is selected.

FREQ:
Lights when the frequency mode is selected.

CHARA:
Lights when the station name memory mode is selected.

SEARCH:
Lights when the program type search mode is selected.

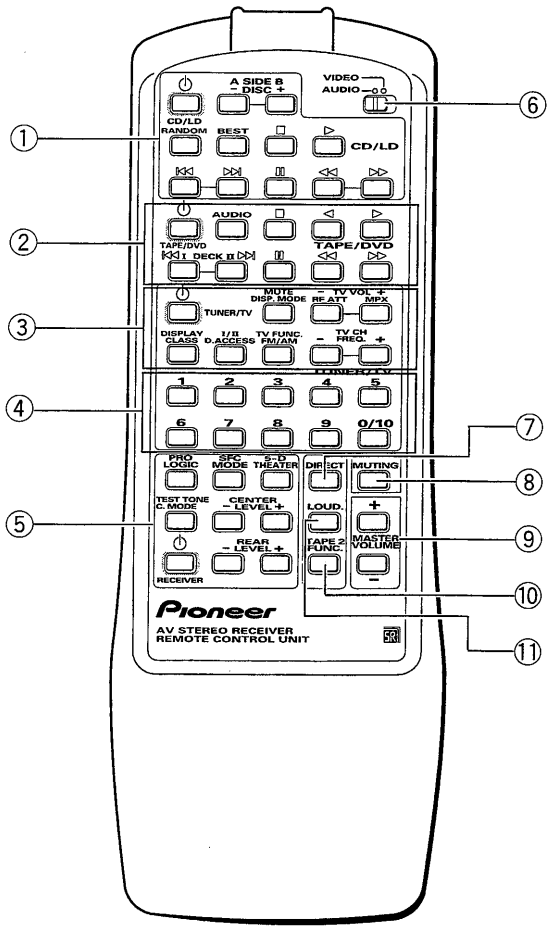
⑮ **MEMORY indicator**
Lights when station memory mode is set.

⑯ **AM/FM indicators**
The indicator of the band currently selected (AM/FM) lights.

⑰ **CHARACTER display**

⑱ **STATION display**
Indicates the station number currently selected.

Remote control unit



① CD/LD buttons

(When the MODE switch is set to AUDIO)
Sets CD.
CD POWER ON/OFF, DISC –/+, RANDOM, BEST, □, ▷, |◁◁, ▷▷|, ▯▯, ◁◁, ▷▷

(When the MODE switch is set to VIDEO)
Sets LD.
LD POWER ON/OFF, SIDE A/B, □, ▷, |◁◁, ▷▷|, ▯▯, ◁◁, ▷▷

② TAPE/DVD buttons

(When the MODE switch is set to AUDIO)
Sets TAPE DECK.
TAPE POWER ON/OFF, □, ◁, ▷, DECK I/II, ▯▯, ◁◁, ▷▷

(When the MODE switch is set to VIDEO)
Sets DVD.
DVD POWER ON/OFF, AUDIO, □, ▷, |◁◁, ▷▷|, ▯▯, ◁◁, ▷▷

③ TUNER/TV buttons

(When the MODE switch is set to AUDIO)
Sets FM/AM tuner.
DISP. MODE, RF ATT, MPX, CLASS, D. ACCESS, FM/AM, FREQ –/+

MPX
Use to switch the auto stereo/monaural mode for receiving FM broadcasts. When the received broadcast signal is weak, press this button to set the monaural mode.

(When the MODE switch is set to VIDEO)
Sets TV.
TV POWER ON/OFF, MUTE, TV VOL –/+, DISPLAY, I/II, TV FUNC, TV CH –/+

④ Number buttons

⑤ RECEIVER buttons

PRO LOGIC
Use to turn ON/OFF DOLBY PRO LOGIC surround.

SFC MODE
Use to select from 2 types of SFC MODE.
STUDIO → ARENA → SURR OFF →

5-D THEATER
Use to select from 2 types of 5-D THEATER.
5-D PRO LOGIC → 5-D SURR → SURR OFF →

TEST TONE/C.MODE

(When the MODE switch is set to VIDEO)
TEST TONE
When SFC MODE or DOLBY PRO LOGIC is ON, volume balance adjustment signals are output in order from each speaker and center/rear level can be adjusted.

(When the MODE switch is set to AUDIO)
C.MODE
Switches the center mode.
NORMAL → WIDE → PHANTOM → 3ch LOGIC →

CENTER LEVEL –/+
Adjusts the center level.

RECEIVER POWER
Use to switch the RECEIVER power to ON or STANDBY.

REAR LEVEL –/+
Adjusts the rear level.

⑥ MODE switch

Use to switch the remote control unit modes.

⑦ DIRECT button

⑧ MUTING button

Turns ON when the volume is muted.

⑨ MASTER VOLUME –/+ buttons

Use to adjust the volume.

⑩ TAPE 2/FUNC. button

(When the MODE switch is set to VIDEO)
TAPE 2
Use to turn ON the TAPE 2 monitor.

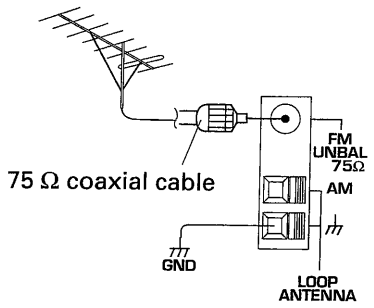
(When the MODE switch is set to AUDIO)
FUNC. (FUNCTION)
Use to switch the function.

⑪ LOUD. (LOUDNESS) button

CONNECTING DEVICES

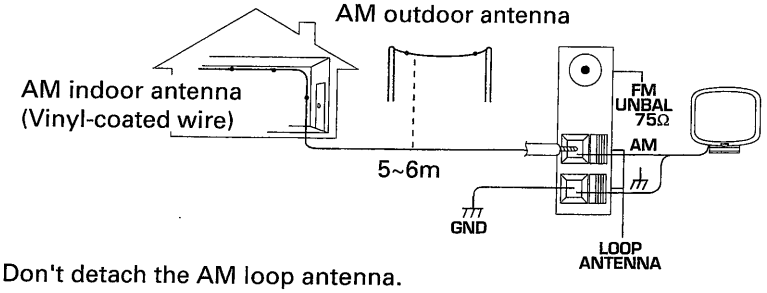
Before making or changing the connections, switch off the power switch and disconnect the power cord from the AC outlet.

■ For better reception of signals, use an FM external antenna.



■ When AM broadcast reception is poor

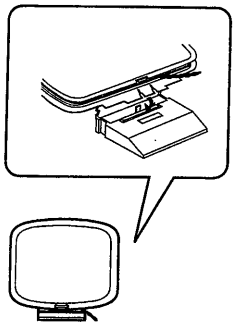
Connect a 5 to 6 meter long vinyl-coated wire to the AM antenna terminal. If possible draw horizontally outdoors to achieve better reception.



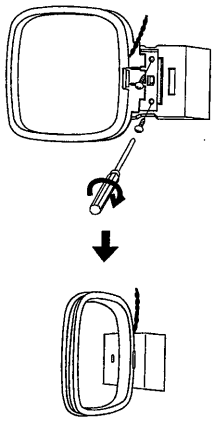
Don't detach the AM loop antenna.

The ⏚ (signal earth) helps reduce noise when an antenna is connected. It is not a safety earth.

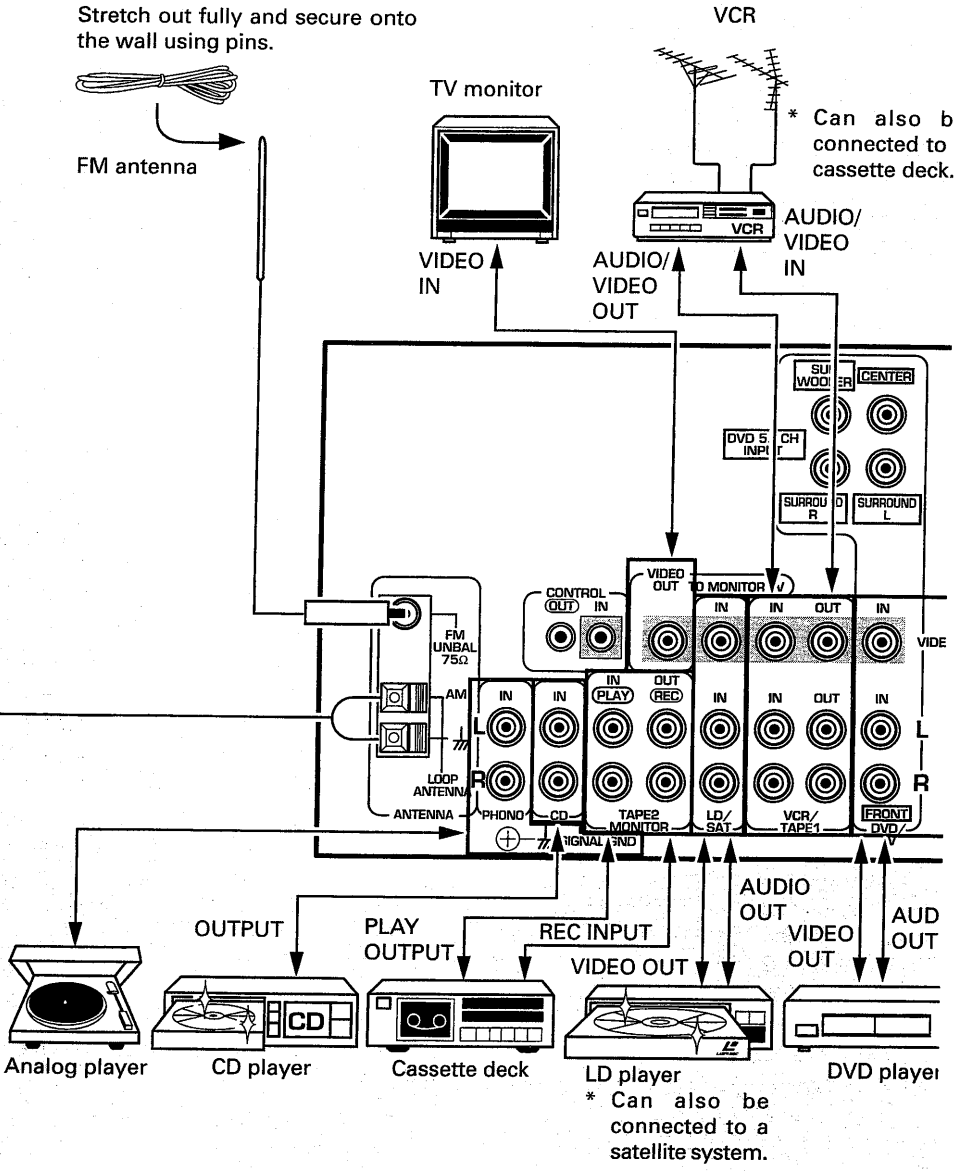
■ Assembling the AM loop antenna



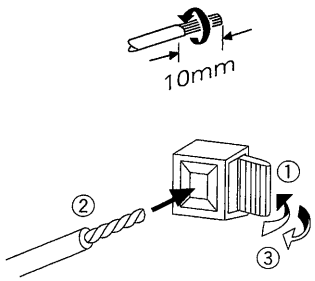
When attaching on a wall, etc.



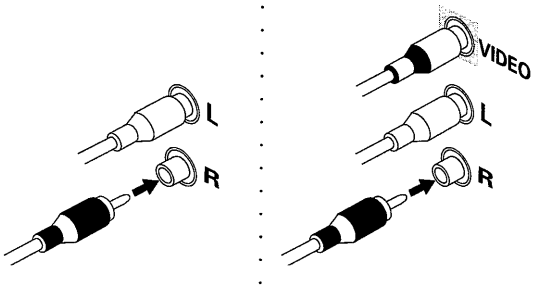
Face towards the direction with the best reception.



■ AM antenna terminal



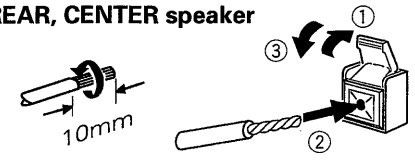
■ Input/output plugs



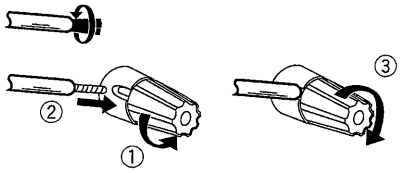
Connect the white plug to L, red plug to R, and yellow plug to VIDEO. Be sure to insert completely.

■ Speaker terminals

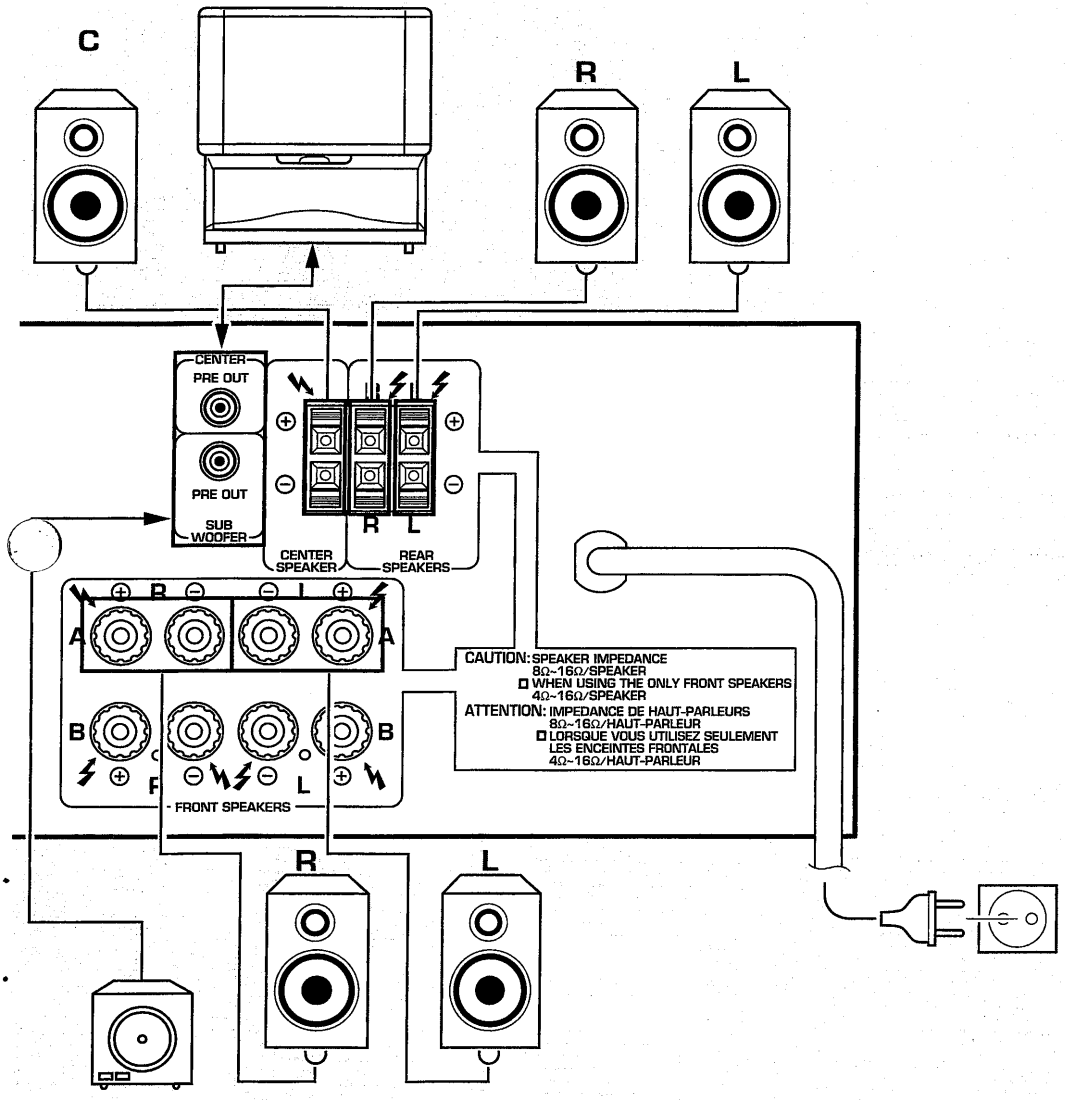
REAR, CENTER speaker



FRONT speaker



* The size of characters and terminal positions in the figures may differ from those on the actual product.



memo

Use nominal impedances ranging from 8 Ω to 16 Ω for the speaker system.
When using the only front speakers, use nominal impedances ranging from 4 Ω to 16 Ω.

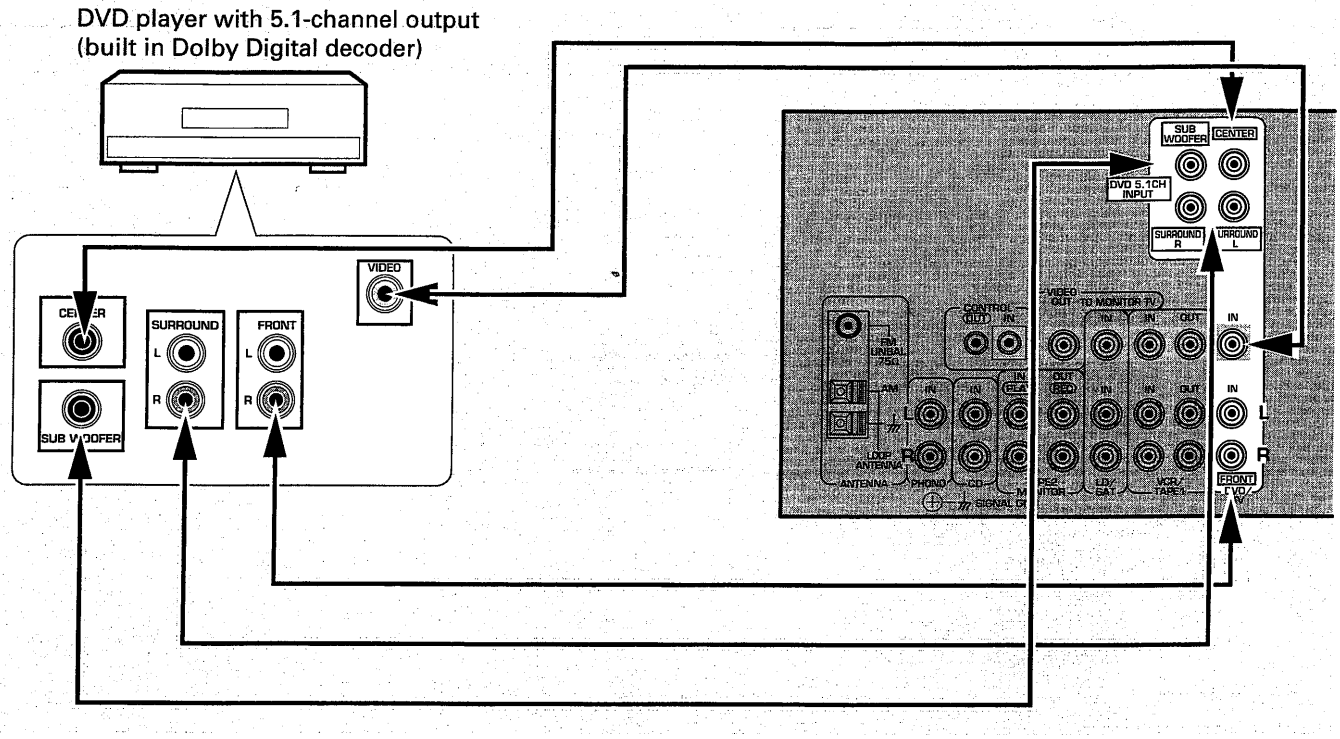
DVD 5.1-channel input terminals

When using DVD/TV functions, the unit supports both 2-channel and 5.1-channel input (refer to page 27 "5.1CH INPUT"). When the 5.1-channel mode is selected, SURROUND L, R, CENTER and SUB WOOFER terminal are enabled, thus allowing the connection of a Dolby Digital decoder or DVD player with 5.1-channel output.

memo

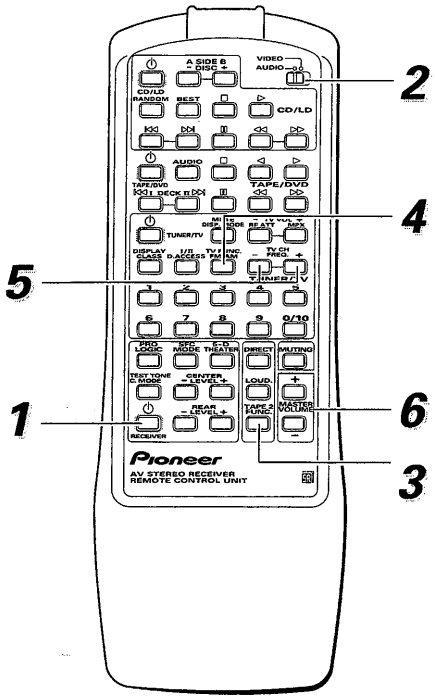
- 5.1-channel inputs are supported only during use of the DVD/TV function.
- Other functions cannot be used with 5.1-channel input.

[Connection Example]



Turn ON the MAIN POWER button of this unit.

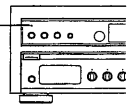
LISTENING TO FM/AM BROADCASTS



memo Turn OFF TAPE 2 MONITOR (the Indicator goes off).

1. **Turn ON the power of the receiver.**

→ STANDBY indicator goes off.



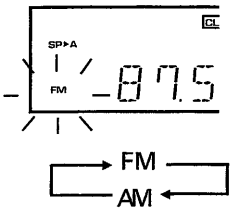
2. **Set the mode switch to AUDIO.**

3. **Select the TUNER function.**

→

4. **Select the band (FM or AM).**

→



5. **Select the broadcast station.**

→ Refer to "Selecting broadcast stations" below.

6. **Adjust the volume.**

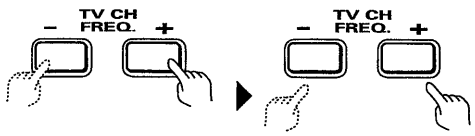
Selecting broadcast stations

① Selecting step by step

Press lightly and release.

87.50
87.55
87.60
⋮

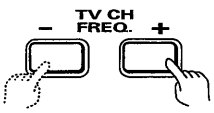
② Selecting automatically



(Press and hold for approx. 1 second, then release.)

87.50
↓
89.50
Stops when received.

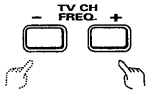
③ Selecting at high speed

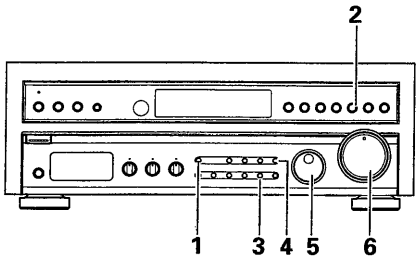


Press continuously.

87.50
87.55
⋮
89.50

Stops when released.





■ Selecting a broadcast station using this unit

1. **Press the ⏻ STANDBY/ON button to turn the power ON.**
2. **Set the TUNER function.**
3. **Press the FM/AM button and select FM or AM broadcast.**
4. **Press the SELECT button, to set the frequency mode.**
   FREQ indicator lights.
5. **Rotate the MULTI-JOG and adjust to the desired broadcast station.**
   The TUNED indicator lights up when a broadcast program is received.
6. **Adjust the volume.**

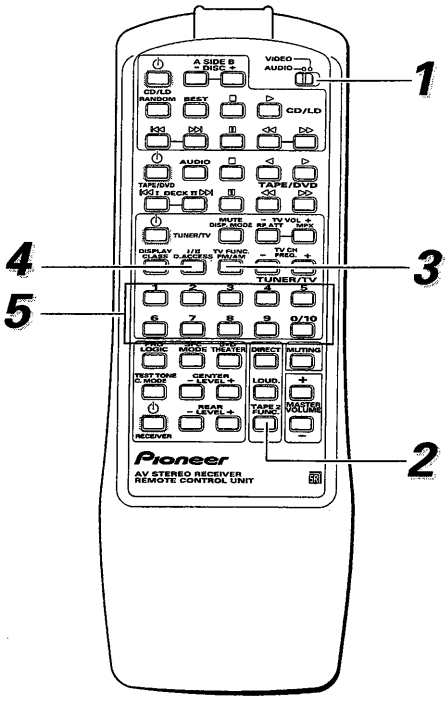
memo

- The TUNED indicator will not light when a broadcast station is too far away or when the broadcasting signal is weak.
- The MULTI JOG cannot be used in "■ Selecting the broadcast station (② Selecting automatically)" on page 15.

Directly inputting the frequency [Direct Access (remote control unit only)]

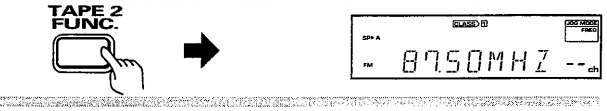
A broadcast station (frequency) can be directly selected using the number buttons on the remote control unit.

memo Turn OFF the TAPE 2 MONITOR (the indicator goes off).



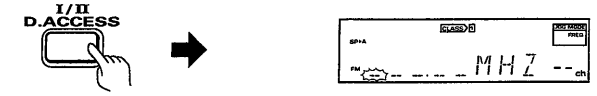
1. Set the mode switch to AUDIO.

2. Select the TUNER function.



3. Select the band (FM or AM).

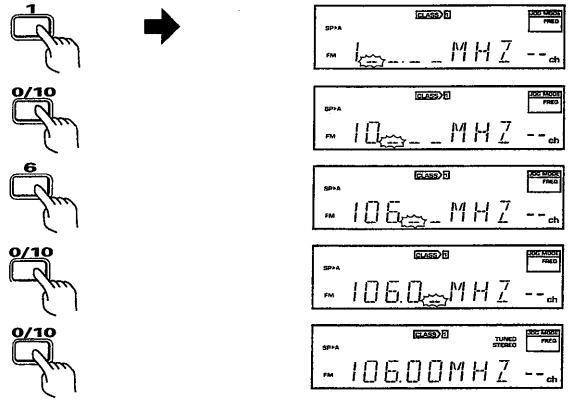
4. Set the direct access mode.



5. Select the broadcast station.

Press the numbers of the frequency to be received in order.

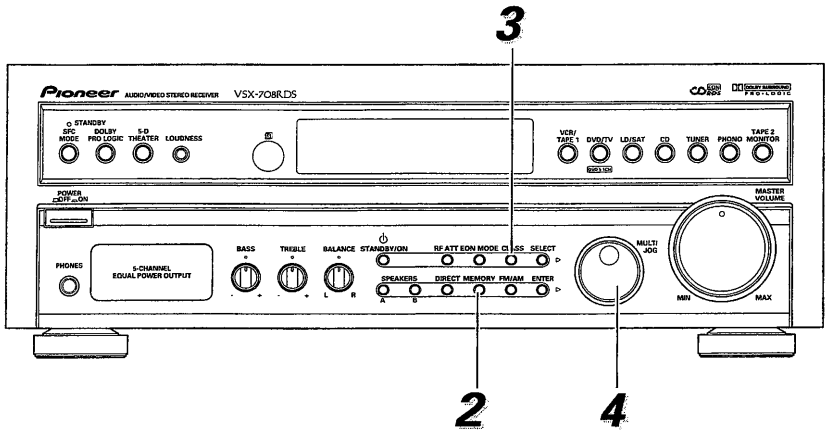
For example, to receive FM 106,00 MHz.



■ Canceling the frequency input

The frequency input can be canceled by pressing the D.ACCESS button again. Input the frequency again correctly after pressing the D.ACCESS button again.

Memorizing frequently used stations (Main unit only)



memo

- The frequency received, MPX MODE (FM only) and also RF ATT (FM only) can be memorized.
- Up to 10 stations can be memorized in each of three classes.

1. Receive the desired station. ➡ Refer to "Listening to FM/AM broadcasts" (Pages 15 and 16).

2. Set the MEMORY mode.

MEMORY

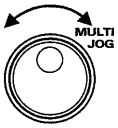
➡

3. Select the desired class number.

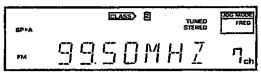
CLASS

➡ CLASS 1 ⟶ CLASS 2 ⟶ CLASS 3 ⟶

4. Select the desired station number.



➡

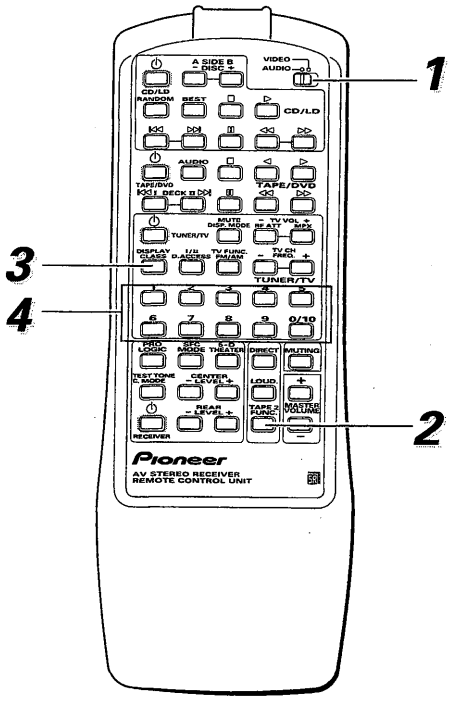


Rotate the MULTI JOG to select the station number and press the ENTER button to memorize the selection. (Even if ENTER is not pressed, the selection will be automatically memorized in 5 seconds.)

CLASS 1(1 ⟷ 10ch) ⟷ CLASS 2(1 ⟷ 10ch) ⟷ CLASS 3(1 ⟷ 10ch)

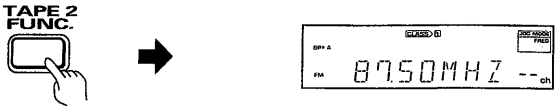
Repeat steps 1 to 4 to memorize up to 30 stations.

Listening to Memorized Stations

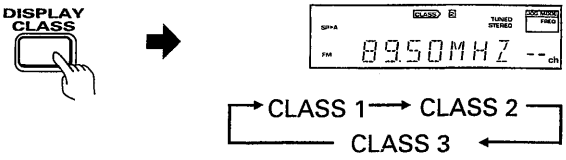


1. **Set the mode switch to AUDIO.**

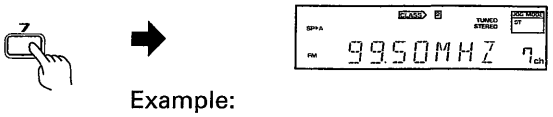
2. **Select the TUNER function.**



3. **Select the CLASS number in which the desired station is memorized.**



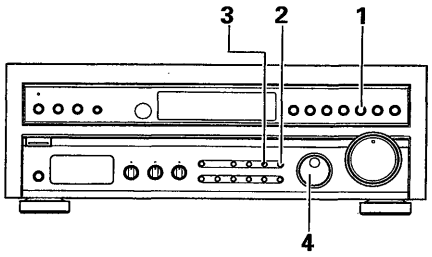
4. **Select the station number of the desired station.**



Example:
When FM99,50 MHz has been memorized in channel 7 of CLASS 2.

memo

Use the CHANNEL +/– buttons to select other memorized station numbers.



■ Operating with the main unit

1. **Press the TUNER button.**
2. **Press the SELECT button to set the station mode.**
   The ST indicator lights.
3. **Press the CLASS button, and select the CLASS number in which the desired station has been memorized.**
4. **Rotate the MULTI-JOG, and select the desired station number which has been memorized.**

memo

When the power cord of the unit is disconnected from the wall outlet or the main power switch is turned off for several days, the stations memorized will be erased.

■ Last Station Memory

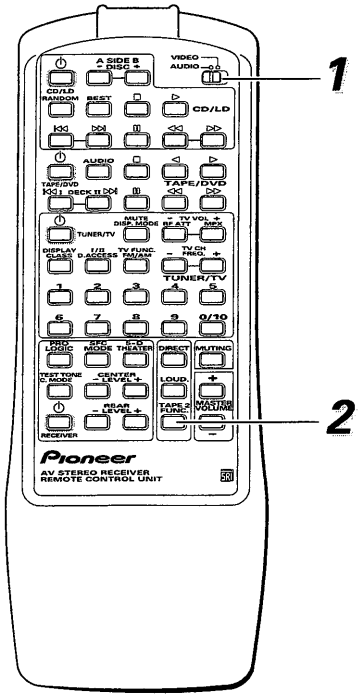
By turning ON the power and setting TUNER, the station set before the power was turned OFF will be received.

RECORDING

Recording with TAPE 1 or TAPE 2

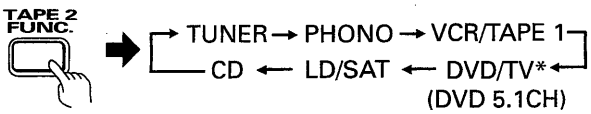
memo

Turn ON the power of all equipment to be used.



1. Set the mode switch to AUDIO.

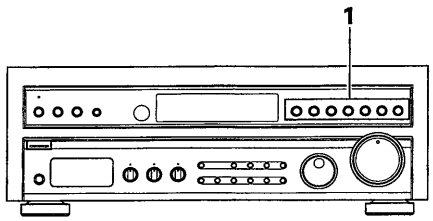
2. Select the source to be recorded.



* The input name selected with the DVD/TV button is displayed.

3. Start recording with TAPE 1 or TAPE 2.

4. Play back the source to be recorded.



■ Operating with the main unit

1. Select the source to be recorded using the Function buttons.
2. Start recording with TAPE 1 or TAPE 2.
3. Play back the source to be recorded.

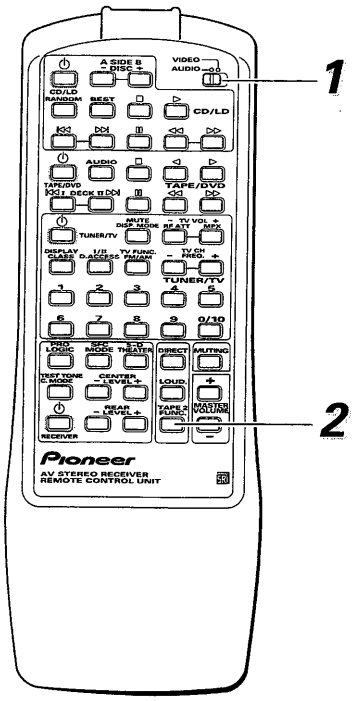
memo

- The VCR/TAPE 1 sounds cannot be recorded with TAPE 1.
- The volume, tone, balance, and surround setting of this unit have no effect on the recording signal.

■ Recording Monitor

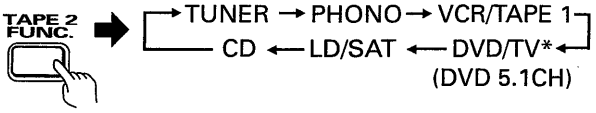
When recording with TAPE 2, if the recording device connected has a recording monitor function, turning ON the TAPE 2 MONITOR button will enable recording to be carried out simultaneously with playback monitoring (the TAPE 2 indicator lights).

Recording with a VCR



1. **Set the mode switch to AUDIO.**

2. **Select the source to be recorded.**



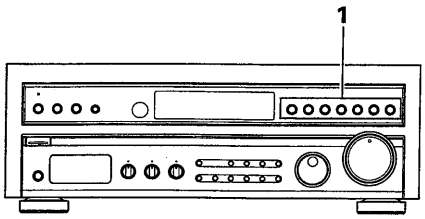
* The input name selected with the DVD/TV button is displayed.

3. **Start recording with a VCR.**

4. **Play back the source to be recorded.**

memo

The signal from VCR/TAPE 1 cannot be recorded.

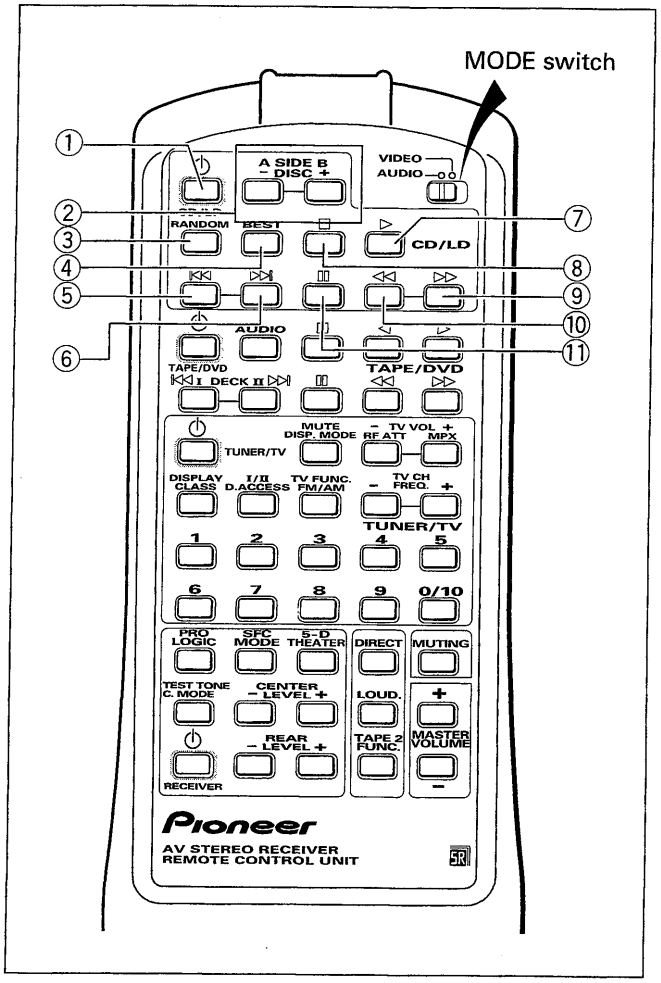


■ Operating with the main unit

1. Select the source to be recorded using the Function buttons.
2. Start recording with a VCR.
3. Play back the source to be recorded.

memo

The volume, tone, balance, and surround setting of this unit have no effect on the recording signal.



OPERATING OTHER COMPONENTS
(PIONEER products bearing the SR mark only)

CD PLAYER operation

Switch the function to CD, <u>switch the MODE switch to AUDIO,</u> and operate as desired using the following buttons.

① ⏻ **CD**
Use to turn ON/OFF the CD player.

② **DISC –/+**
Use to select the disc for CD players which can play several discs.

③ **RANDOM**
Plays the tracks randomly.

④ **BEST**
Use to select and listen to only the desired songs. When pressed at the desired song while playing back CDs, the unit will memorize the track number, and play only the memorized songs later.

⑤ ⏮
Pressing and releasing this button immediately returns playback to the beginning of the track currently being played. Pressing it continuously returns playback to the beginning of a previous track.

⑥ ⏭
Pressing and releasing this button immediately advances playback to the beginning of the next track. Pressing it continuously advances playback to the beginning of a future track.

⑦ ▶
Starts playback.

⑧ ■
Stops playback.

⑨ ⏩
Continuously pressing this button will set fast forward playback.

⑩ ⏪
Continuously pressing this button will set fast rewind playback.

⑪ ⏸
Use to pause playback.

LD PLAYER operation

Switch the function to LD, <u>switch the MODE switch to VIDEO,</u> and operate as desired using the following buttons.

① ⏻ **LD**
Use to turn ON/OFF the LD player.

② **SIDE A/B**
Switches between sides A and B of the disc.

⑤ ⏮
Pressing and releasing this button immediately returns playback to the beginning of the chapter (track) currently being played. Pressing it continuously returns playback to the beginning of a previous chapter (track).

⑥ ⏭
Pressing and releasing this button immediately advances playback to the beginning of the next chapter (track). Pressing it continuously advances playback to the beginning of a future chapter (track).

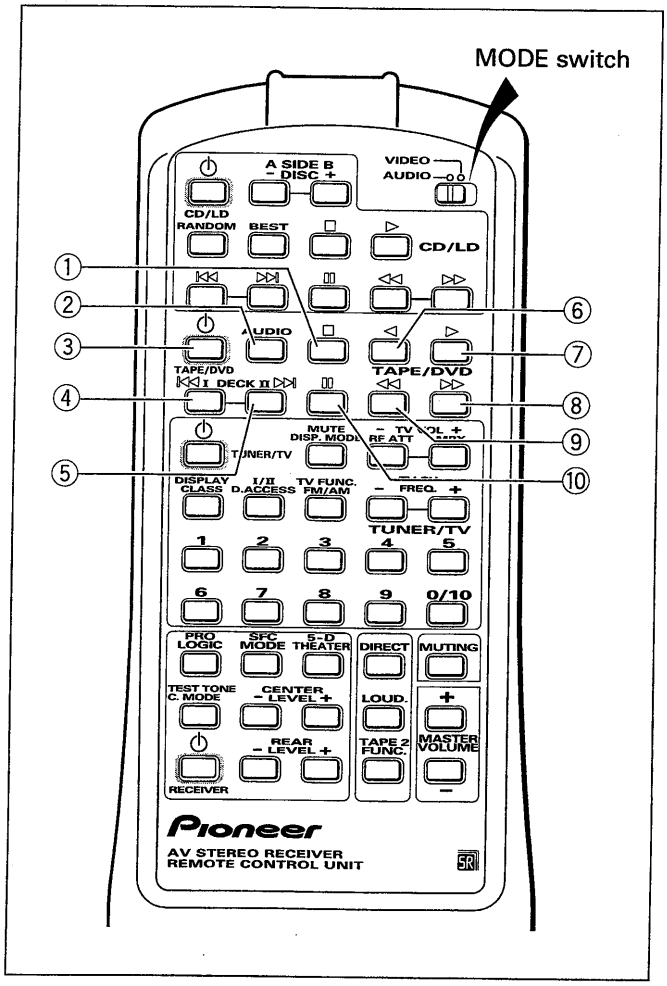
⑦ ▶
Starts playback.

⑧ ■
Pressing this button during playback will stop the unit. (With some LD players, the disc table may come out if pressed during stop.)

⑨ ⏩
Continuously pressing this button will set fast forward playback.

⑩ ⏪
Continuously pressing this button will set fast rewind playback.

⑪ ⏸
Use to pause. (In some players, pressing this button may set still pictures.)



CASSETTE DECK operation

Switch the function to VCR/TAPE 1 or TAPE 2 MONITOR, switch the MODE switch to AUDIO, and operate as desired using the following buttons. When operating a single deck, press the DECK II button first.

① ■
Stops tape running.

③ ⏻ **TAPE**
Use to turn ON/OFF the cassette deck.

④ **DECK I**
Press to operate DECK I for double decks.

⑤ **DECK II**
Press to operate DECK II for double decks.

⑥ ◄
Plays in the arrow direction.

⑦ ►
Plays in the arrow direction.

⑧ ►►
Fast forwards the tape. Pressing this button during playback will start fast forward playback.

⑨ ◄◄
Rewinds the tape. Pressing this button during playback will start fast rewind playback.

⑩ ❚❚
Pauses playback and recording.

DVD PLAYER operation

Switch the function to DVD/TV, switch the MODE switch to VIDEO, and operate as desired using the following buttons.

① ■
Pressing this button during playback will stop the unit.

② **AUDIO**
Use to select a sound mode.

③ ⏻ **DVD**
Use to turn ON/OFF the DVD player.

④ |◄◄
Pressing and releasing this button immediately returns playback to the beginning of the chapter (track) currently being played. Pressing it continuously returns playback to the beginning of a previous chapter (track).

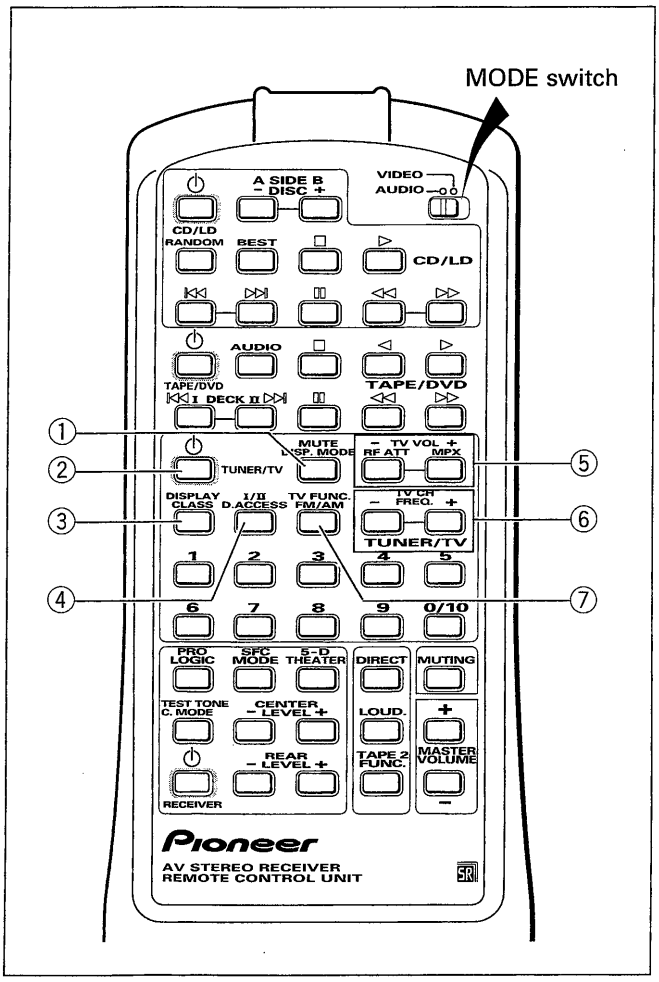
⑤ ►►|
Pressing and releasing this button immediately advances playback to the beginning of the next chapter (track). Pressing it continuously advances playback to the beginning of a future chapter (track).

⑦ ►
Starts playback.

⑧ ►►
Continuously pressing this button will start fast forward playback.

⑨ ◄◄
Continuously pressing this button will set fast rewind playback.

⑩ ❚❚
Use to pause. (In some players, pressing this button may set still pictures.)



TV operation

Switch the function to DVD/TV, switch the MODE switch to VIDEO, and operate as desired using the following buttons.

① **MUTE**
Use to mute the TV volume.

② ⏻ **TV POWER**
Use to turn ON/OFF the TV.

③ **DISPLAY**
Displays the state of TV setting.

④ **I/II**
Use to select a sound mode.

⑤ **TV VOL –/+**
Use to adjust the TV volume.

⑥ **TV CH –/+**
Use to select a TV broadcast channel.

⑦ **TV FUNC. (FUNCTION)**
Use to select the TV input.

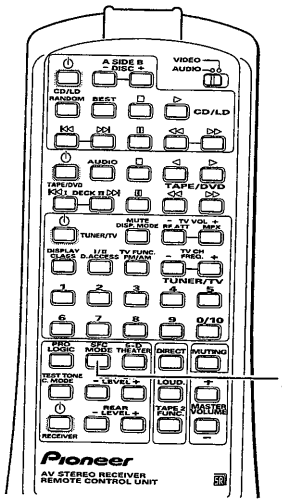
memo

If your unit does not have a certain function, it will not respond when the button of that function on the remote control unit is pressed.

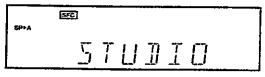
4. VARIOUS OPERATIONS

ENJOYING SURROUND EFFECTS

Switching the SFC MODE



Select the sound effects.

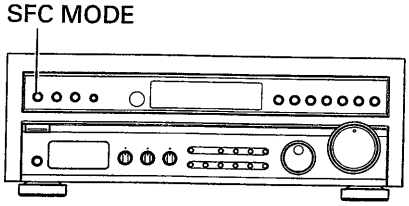


Refer to page 33 for the characteristics of the surround effects.

STUDIO → ARENA → SURR OFF → STUDIO

memo

This function does not work when the 5.1-channel input (P.27) is set.



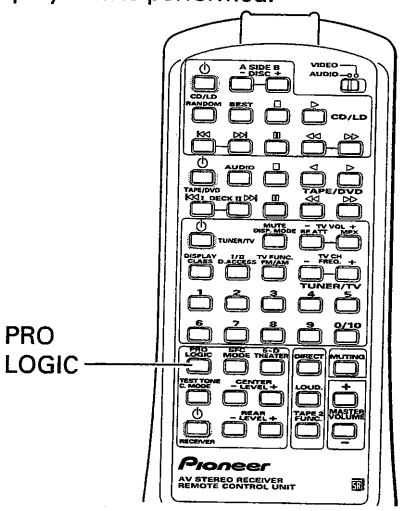
■ Operating with the main unit

Press the SFC MODE button.
Each time it is pressed, the surround effects change as follows.

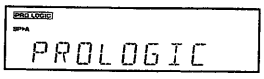
STUDIO → ARENA → SURR OFF → STUDIO

Switching the Dolby Pro Logic

When the Dolby mode is ON, Dolby Pro Logic Surround is automatically switched according to the input signal, and playback is performed.



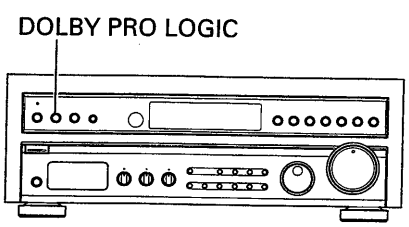
Switch Dolby Pro Logic .



Each time it is pressed, the mode is turned ON/OFF.

memo

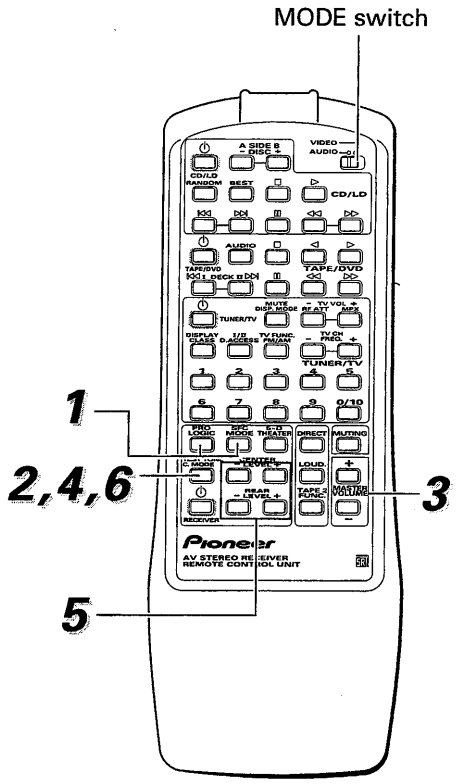
This function does not work when the 5.1-channel input (P.27) is set.



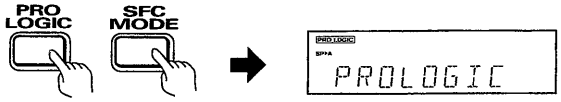
■ Operating with the main unit

Press the DOLBY PRO LOGIC button.
Dolby Pro Logic is turned ON/OFF each time it is pressed.

Enjoying movie and music sources in surround mode

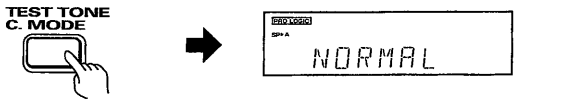


1. Select Dolby Pro Logic or SFC mode.



Only when Dolby Pro Logic is selected

2. Select the center mode.
(Before operating, switch the MODE switch to AUDIO.)

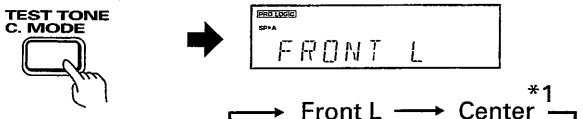


NORMAL → WIDE → 3CH LOGIC ← PHANTOM ←

Refer to page 33 for the characteristics of the center modes.

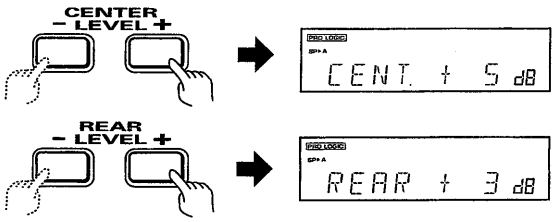
3. Adjust to the desired volume.

4. Set the test tone.
(Before operating, switch the MODE switch to VIDEO.)



Front L → Center *1 → Front R → Rear *2 ←

5. Adjust the center level, rear level, so that the test tone volume output from each speaker is the same.*1



6. Turn OFF the test tone.

7. Play the desired source.

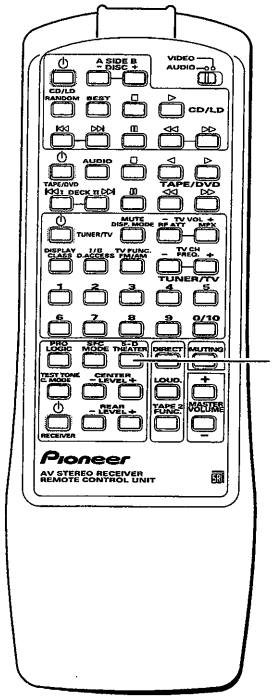
memo

- This function does not work when the 5.1-channel input (P.27) is set.

*1 When PHANTOM is selected in the center mode or when SFC mode is selected, no test tone is output from the center speaker.

*2 When 3CH LOGIC is selected in the center mode, no test tone from the rear speaker is output.

Turning ON 5-D THEATER



The 5-D THEATER function provides clear dynamic sound effects by outputting audio signals through the rear channel to simulate stereo sound. Select from the two modes according to the source.

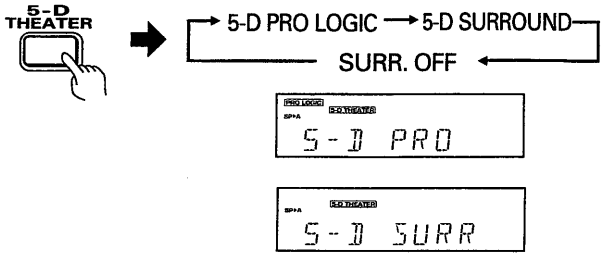
①5-D PRO LOGIC
Suitable for DOLBY PRO LOGIC surround sources with lots of movement such as action movies. It provides sounds with more speed.

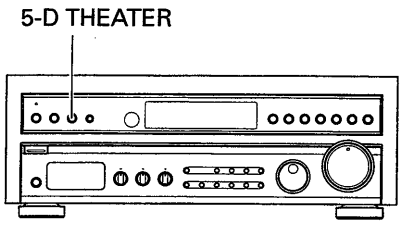
②5-D SURROUND
Suitable for stereo sources (CD, etc.).
Mixing the surround effects with the 5-D THEATER effects will provide sound with depth.

memo

- Effects may be less in scenes where sounds do not shift between L and R channels.
- This function does not work when the 5.1-channel input (P.27) is set.

Select the 5-D THEATER mode.





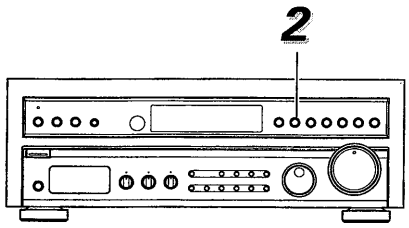
■ Operating with the main unit

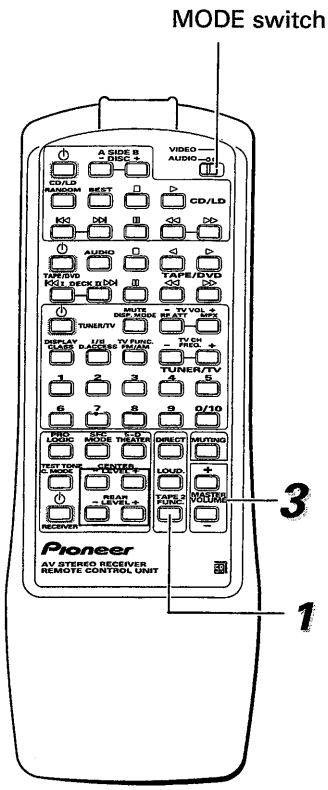
Press the 5-D THEATER button.
The mode is switched as follows with each press.

5-D PRO LOGIC → 5-D SURROUND → SURR. OFF →

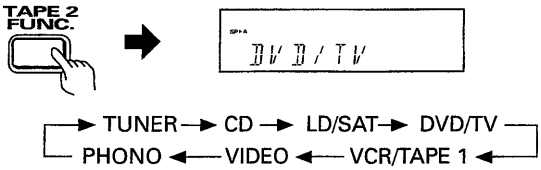
5.1CH INPUT

Some DVD players on the market are equipped with a built-in decoder to convert DOLBY DIGITAL signals into analog signals for 5.1 channels -the FRONT L ch, FRONT R ch, CENTER ch, SURROUND L ch, and SURROUND R ch- (As the SUB WOOFER ch only has low frequency components, it is counted as 0.1 ch.).
For use together with these DVD players, this unit is also able to play DOLBY DIGITAL disc although it does not have a built-in DOLBY DIGITAL decoder.

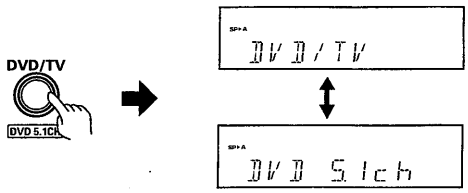




1. Select the function DVD/TV.



2. Switch to the 5.1 ch input.
Each time this button is pressed, the display switches between 5.1 ch and 2 ch.



3. Adjust to the desired volume.

4. Play the desired source.

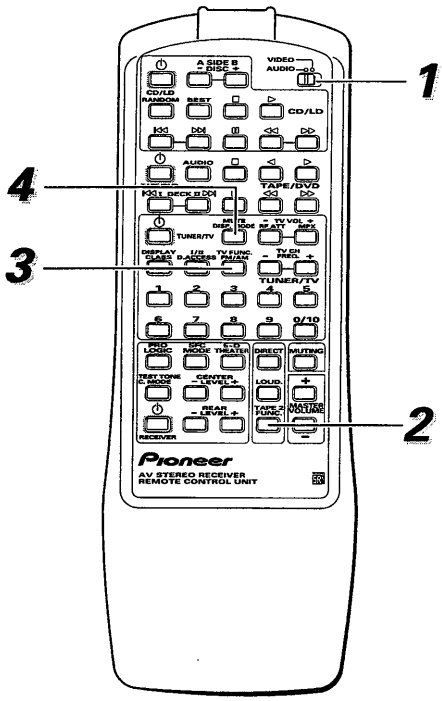
memo

- During the 5.1 ch input mode, the DOLBY PRO LOGIC, SFC MODE, DIRECT, 5-D THEATER and SPEAKERS B buttons will not work.
- During the 5.1 ch input mode, the CENTER mode cannot be switched, and the DELAY TIME, and EFFECT LEVEL cannot be adjusted.

RDS (Radio Data System) BROADCAST RECEPTION

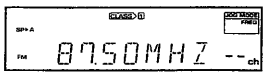
Refer to page 32 for RDS (Radio Data System) details.

Displaying the RDS data (remote control unit only)

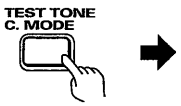


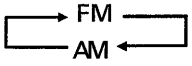
1. **Set the mode switch to AUDIO.**

2. **Select the TUNER function.**



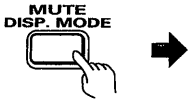
3. **Select FM.**



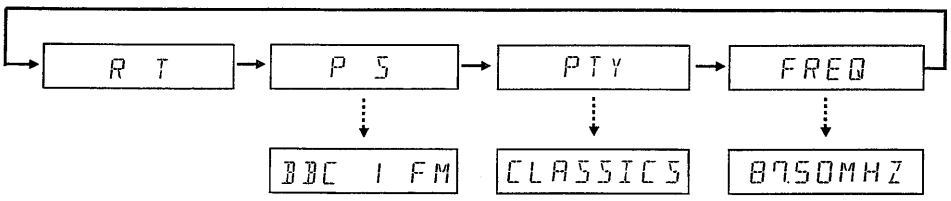


* If the received broadcast transmits RDS data, the RDS indicator lights, and the data of the display mode appears in the display.

4. **Select a mode.**



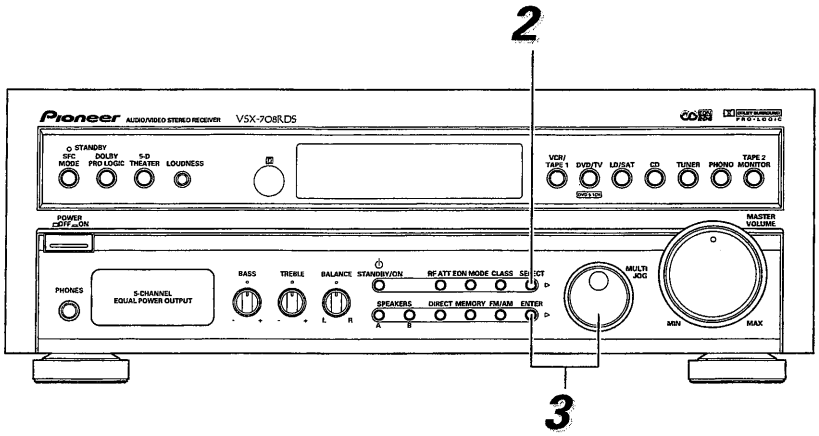
The display changes by pressing the DISP MODE button.



memo

- In the RT mode, should any noise be picked up while displaying the RT scroll, some characters may temporarily be incorrectly displayed.
- In the RT mode, when no RT data is transmitted from a broadcast station, "NO RADIO TEXT DATA" is displayed once and after that the PS data is displayed.
- In PTY mode during RDS broadcast reception, there are cases where "NO TYPE" is displayed. In this case, it will automatically switch to PS mode after a few seconds.
- When reception conditions are strong, and RDS data is incorrectly displayed, press the RF ATT button.

Memorizing a desired broadcast station name (Manual Station Name Memory) (Main unit only)



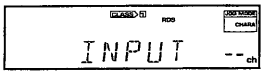
memo

- Four characters can be memorized for each broadcast station.
- If a preset class number or station number is memorized, the old memorized data will be erased.
- The memorized name takes priority over the PS data and will be displayed.

1. Receive the desired station. ➡ Refer to "Listening to FM/AM broadcasts" (Pages 15 and 16).

2. Select the character input mode.

SELECT



* Each time you press the SELECT button, the JOG MODE indicator changes as follows.

When FM is selected:

ST → FREQ → SEARCH → CHARA → ST

When AM is selected:

ST → FREQ → CHARA → ST

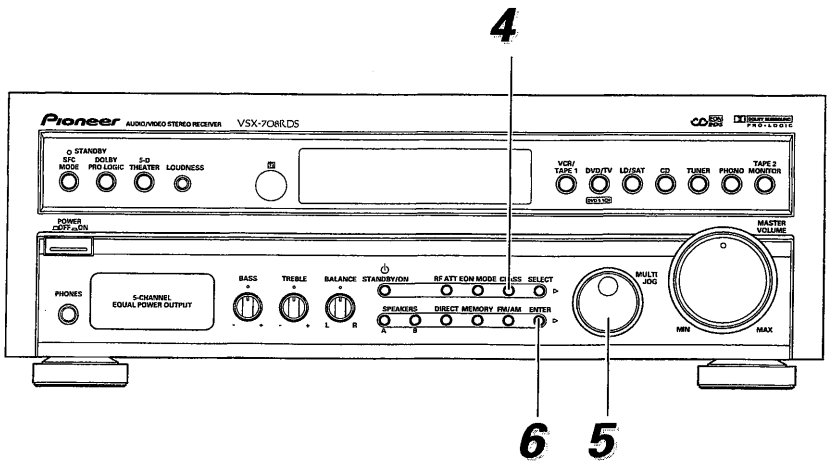
3. Enter the broadcast station name.

MULTI JOG

* Turn the MULTI JOG to display the desired character. (Refer to "Character display used station name input" on page 36.)

ENTER

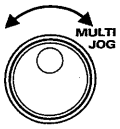
Press the ENTER button to input the first of four characters. After four characters have been entered, the MEMORY indicator lights.



4. **Select the desired class number.**

CLASS 1 → CLASS 2 → CLASS 3 →

5. **Select the desired station number.**



Example:
When the station name WEST is memorized to 4 ch of CLASS 1.

6. **Set the memory.**

Repeat steps 1 to 6 to memorize up to 30 broadcast station names.

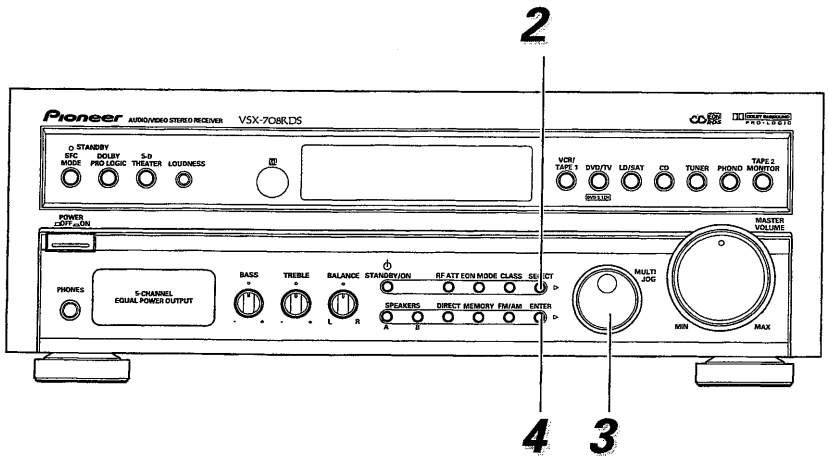
■ To erase and change the memorized station name

Perform the procedures of "Memorizing a desired broadcast station name" and input four spaces to erase the memorized station name.
When you want to change a memorized station name, input the new station name using the same procedure.

memo

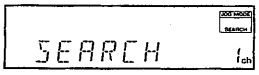
For greater convenience, record memorized station names in the STATION "memo" on page 36.

Searching for a desired program by program type (PTY) (Main unit only)



1. Select the FM band. ➡ Refer to "Listening to FM/AM broadcasts" (Pages 15 and 16).

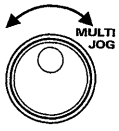
2. Select the PTY search mode.

➡ 

* Each time you press the SELECT button, the JOG MODE indicator changes as follows.

ST → FREQ → CHARA → SEARCH → ST

3. Select the desired program type.



➡

* Refer to pages 35 and 36 for program types.

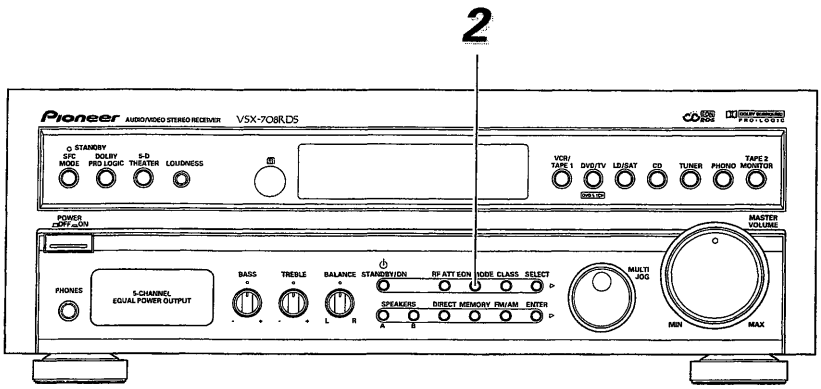
4. Search the selected program.

➡ Searches randomly for a memorized broadcast station. Press the ENTER button within 5 seconds after the desired program has been found. If the ENTER button is not pressed, the function will search for the next station automatically.

memo

This function searches RDS stations preset in the 30ch memory. If this function is set when no stations have been preset, "NO PTY" will be displayed. And if the desired PTY could not be found amongst the RDS stations searched in the memory, the same display will appear.

Setting EON (Main unit only)

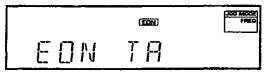


Refer to page 34 for EON details.

1. Receive the desired EON FM station. ➡ Refer to "Listening to FM/AM broadcasts" (Pages 15 and 16).

2. Select the mode.

➡



EON TA ⟶ EON NEWS

OFF ⟵

* When it is set to OFF, a receiving frequency or a memorized station name will be displayed.

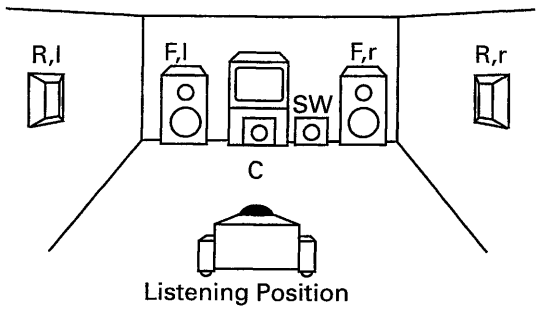
memo

- The EON mode is cancelled if you switch to AM reception during setting EON. It starts once more when you return to FM reception.
- Simultaneous request waiting for Traffic Information (TA) and News programs is not possible.
- Some functions cannot be used while the EON MODE indicator lights or flashes.
- Function other than TUNER cannot be changed while the EON MODE indicator flashes (receiving on EON broadcast).
  If you want to change to a function other than TUNER, press the EON MODE button and turn the EON MODE off.
- You cannot listen to Traffic Information (TA) and News programs when you playback TAPE 2 while setting EON.

SURROUND

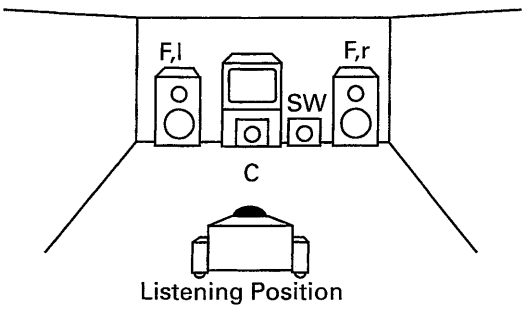
Dolby Pro Logic Surround

Set to this position for video and music sources (especially sources with the DOLBY SURROUND mark). Dolby Pro Logic Surround continuously detects the size and direction of signals. As a result, the position of the sound source becomes clear, enabling reproduction of natural sound flow.



Dolby 3CH Logic

Same system as the Dolby Pro Logic surround except that REAR speakers are not installed. REAR speaker signals are played back by the FRONT speakers, enabling better reproduction of surround effects and depth than with normal stereo playback.



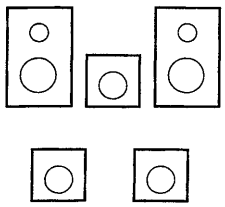
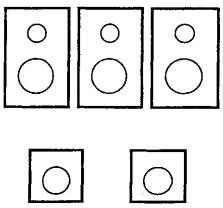
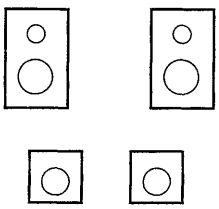
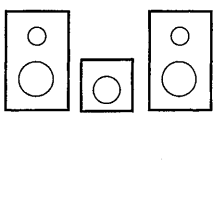
* In the above figure, F stands for FRONT speaker, R for REAR speaker, C for CENTER speaker, SW for sub woofer, r for right, and l for left.

Manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby," the double-D symbol and "Pro Logic" are trademarks of Dolby Laboratories Licensing Corporation.

■ Selecting the center mode

When Dolby Pro Logic is ON, pressing the CENTER MODE button will switch the mode as follows.

NORMAL → WIDE → PHANTOM → 3ch LOGIC → NORMAL

NORMAL	WIDE	PHANTOM	3ch LOGIC
Plays back middle and high range sounds from the CENTER speaker. Sounds are at a fixed position. The bass from the center channel is played back by the FRONT speakers.	Using the same size speaker as the FRONT speakers for the CENTER speaker enables sounds from bass to treble to be played back more naturally.	The center channel sounds are played back between the L and R FRONT speakers.	The surround channel sounds and center channel bass sounds are played back between the L and R FRONT speakers.
			

■ SFC modes

STUDIO	Simulates the acoustic effects of recording studios. Best suited for jazz and combo sources.
ARENA	Simulates the same effects as live performance sources. Best suited for rock, etc.

RDS (Radio Data System)

What is RDS (Radio Data System)

In the RDS system, FM broadcast stations transmit such information as station name and program type in addition to audio signals. This unit receives the following data, displays the three data, RT, PS, PTY, and provides the function, EON MODE.

- **RT (Radio Text) data**
  A message transmitted from the broadcast station using a maximum of 64 characters.

- **PS (Program Service Name) data**
  This refers to the broadcast station name transmitted by an FM broadcast station.

- **PTY (Program Type) data**
  During reception of an FM program, this data indicates the type of program.

EON (Enhanced Other Network information)

Function which switches a frequency automatically when a specified program starts, if it is set as a Traffic Information (TA) or News station in advance. It cannot be used in areas that EON information is not transmitted and when FM broadcast stations do not transmit PTY data.
When the broadcast ends, it returns to the original frequency.

- **TA (Traffic-Announcement identification)**
  This is an on/off switching signal to indicate whether or not traffic information is on the air.

- **NEWS**

PTY ALARM function

Function which switches to the urgent news broadcast of an FM station when it is received (PTY data alarm signal). During reception of this signal, TAPE 2 MONITOR and MUTING will automatically be set to off and the display mode will be set to PTY.

EON control

When EON is turned on and a function other than the tuner is set, the function will switch to the FM station automatically when Traffic Information or News starts.
When the program ends, the original function will be set again.
(Even if EON is turned on, this function will not operate when you switch to an AM broadcast.)

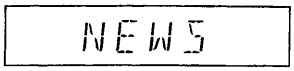
PI (Program Identification)

This information consists of a code enabling the tuner to distinguish between countries or areas in which the same program is transmitted, and the identification of the program itself. The code is not intended for direct display and is assigned to each individual radio program to enable it to be distinguished from all other programs.

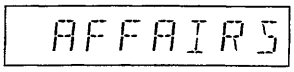
- **PI code registration and deletion**
  To use the EON function, receivable RDS stations must be programmed in the tuner.
  When the PI code is programmed and the same program (PI code) is preset using a different frequency, this function will only operate the most recently set station regardless of the reception state.
  When presetting new frequencies due to relocation to another area, etc., there is a need to delete registered PI codes.
  Perform the following procedure.

1. **Press the EON MODE button for two seconds or more.**
   "ERASE PI" will be displayed.
2. **Within 5 seconds, press the ENTER button.**

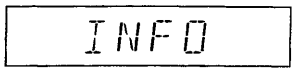
The following are the 29 PTY data titles transmitted.



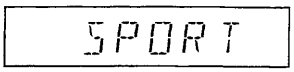
News: Short accounts of facts, events and publicly expressed views, reportage and actuality.



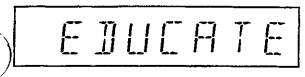
Current affairs: Topical program expanding or enlarging upon the news, generally in a different presentation style or concept, including debate, or analysis.



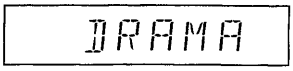
Information: Program's purpose is to impart advice in the widest sense.



Sport: Program concerned with any aspect of sport.

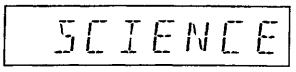


Education: Program intended primarily to educate, of which the formal element is fundamental.

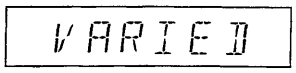


Drama: All radio plays and serials.

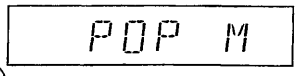
Culture: Programs concerned with any aspect of National or Regional culture, including language, theatre, etc.



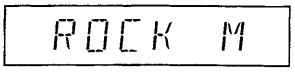
Science: Programs about the natural sciences and technology.



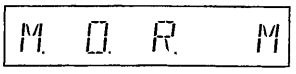
Varied: Used for mainly speech-based programs usually of light-entertainment nature, not covered by other categories. Examples include quiz shows, panel games, and personal interviews.



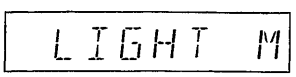
Pop Music: Commercial music, which would generally be considered to be of current popular appeal, often featuring current or recent record sales charts.



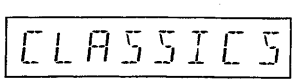
Rock Music: Contemporary modern music, usually written and performed by young musicians.



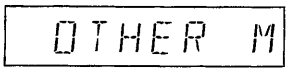
M.O.R. Music: (Middle of the Road Music) Common term to describe music considered to be "easy-listening", as opposed to Pop, Rock or Classical. Music in this category is often but not always, vocal and usually of short duration.



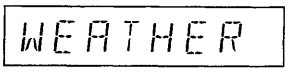
Light classical: Classical Music for general, rather than specialist appreciation. Examples of music in this category are instrumental music, and vocal or choral works.



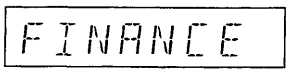
Serious classical: Performances of major orchestral works, symphonies, chamber music etc., and including Grand Opera.



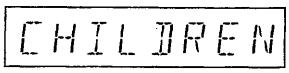
Other music: Musical styles not fitting into any of the other categories. Particularly used for specialist music of which Rhythm & Blues and Reggae are examples.



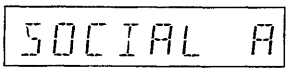
Weather: Weather reports and forecasts and Meteorological information.



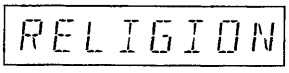
Finance: Stock Market reports, commerce, trading etc.



Children's programs: For programs targeted at a young audience, primarily for entertainment and interest, rather than where the objective is to educate.

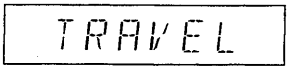


Social Affairs: Programs about people and things that influence individuals or groups. Includes sociology, history, geography, psychology and society.

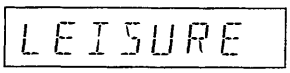


Religion: Any aspect of beliefs and faiths, involving a God or Gods, the nature of existence, and ethics.

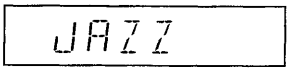
Phone In: Involving members of the public expressing their views either by phone or at a public forum.



Travel: Features and programs concerned with travel to near and far destinations, package tours and travel ideas and opportunities. Not for use of Announcements about problems, delays, or roadworks affecting immediate travel where TP/TA should be used.

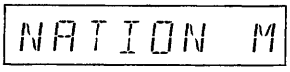


Leisure: Programs concerned with recreational activities in which the listener might participate. Examples include Gardening, Fishing, Antique collecting, Cooking, Food & Wine etc.

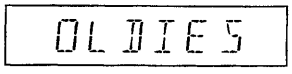


Jazz Music: Polyphonic, syncopated music characterised by improvisation.

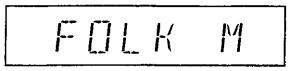
Country Music: Songs which originate from, or continue the musical tradition of the American Southern States. Characterised by a straightforward melody and narrative story line.



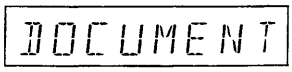
National Music: Current Popular Music of the Nation or region in that country's language, as opposed to International 'Pop' which is usually U.S. or U.K. inspired and in English.



Oldies Music: Music from the so-called "golden age" of popular music.



Folk Music: Music which has its roots in the musical culture of a particular nation, usually played on acoustic instruments. The narrative or story may be based on historical events or people.



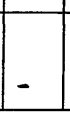
Documentary: Program concerned with factual matters, presented in an investigative style.

STATION CALL button "memo"

It is recommended that you make a note of the preset stations.

CLASS 1	Station No.	*1	*2	*3	*4	*5
	Station Name					
	Frequency					
	Station No.	*6	*7	*8	*9	*10
	Station Name					
	Frequency					
CLASS 2	Station No.	*1	*2	*3	*4	*5
	Station Name					
	Frequency					
	Station No.	*6	*7	*8	*9	*10
	Station Name					
	Frequency					
CLASS 3	Station No.	*1	*2	*3	*4	*5
	Station Name					
	Frequency					
	Station No.	*6	*7	*8	*9	*10
	Station Name					
	Frequency					

Character display used for station name input:

Character	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Display indications																	
Character	R	S	T	U	V	W	X	Y	Z	[	\	]	_	!	0	1	2
Display indications																	
Character	3	4	5	6	7	8	9	"	%	&	'	(	)	*	+	,	-
Display indications																	
Character	.	/	:	=	?	@											
Display indications																	

NOTE:

This unit converts lower case characters transmitted by broadcast stations to upper case characters.

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Cause	Remedy
The power does not turn ON.	● The power plug is disconnected from the outlet. ● The cause may lie in the protection circuit.	● Insert into the wall outlet. ● Disconnect the power plug from the outlet, and insert again.
The unit does not work even when the buttons are pressed.	● Due to effects of static electricity when the air is dry.	● Disconnect the power plug from the outlet, and insert again.
No sound is output when a function is set.	● Not properly connected. ● Sound is muted. ● The volume is turned down. ● The TAPE 2 MONITOR is ON. ● The speaker switch is OFF.	● Refer to pages 12 and 13 and connect again. ● Press the MUTING button on the remote control unit. ● Adjust MASTER VOLUME. ● Press the TAPE 2 MONITOR button. ● Press the SPEAKER button of terminal (A/B) connected to the speakers.
No image is output when a function is set.	● Not properly connected. ● The input source is not properly selected.	● Refer to pages 12 and 13, and connect again. ● Press the correct button.
Considerable noise in radio broadcasts	● Not received at proper frequency. ● The antenna is not connected.	● Receive the correct frequency. ● Connect the antenna properly. (P. 12, 13)
	[FM broadcast reception] ● The FM antenna is not stretched out, and faces an inappropriate direction. ● Weak radio waves. ● Strong radio waves. Sound is distorted.	● Stretch out the antenna and secure it to a wall while selecting the direction and position with the best reception state. ● Change the FM antenna to an outdoor antenna of multiple elements. (P. 12) ● Press the RF ATT button.
	[AM broadcast reception] ● The AM antenna faces inappropriate direction. ● Weak radio waves. ● Affected by other equipment. (Fluorescent lamp, motor, etc.)	● Select the direction and position with the best reception state. ● Connect a 5 to 6 meter long vinyl-coated wire to the AM antenna terminal and extend the wire outdoors, if possible. (P. 12) ● Turn off the equipment which cause noise or move them away from the unit. ● Distance the antenna from the equipment which cause noise.
Broadcast stations cannot be selected automatically.	● Weak radio waves.	● Change the FM antenna to an outdoor antenna of multiple elements. (P. 12)

Symptom	Cause	Remedy
No sound from rear or center speakers.	● Settings are incorrect. ● Rear or Center level is turned down. ● The REAR or CENTER speaker is disconnected.	● Refer to pages 25 and 33, and set. ● Raise the level. ● Connect. (P. 12, 13)
Cannot be remote controlled.	● The remote control unit batteries have worn out. ● Too great of a distance. Bad angle. ● There is an obstacle blocking signals in between the unit and the remote control. ● Strong light such as fluorescent light is shining onto the unit's remote control signal light-receiving window.	● Replace the batteries. (P. 7) ● Operate within 7m, 30 deg. from the left and right of the unit's remote control light-receiving window. ● Remove the obstacle or operate from somewhere else. ● Avoid direct exposure of the remote control light-receiving window to the light.

If the unit does not operate normally due to external effects such as static electricity, disconnect the power plug from the outlet and insert again to return to normal operating conditions.

POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays or other chemicals on or near this unit, since these will corrode the surfaces.

SPECIFICATIONS

Amplifier Section

Continuous average power output of 65 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

Continuous Power Output
(DIN, 1 kHz, T.H.D. 1 %, 4 Ω)
STEREO Front ..... 110 W + 110 W
(DIN, 1 kHz, T.H.D. 1 %, 8 Ω)
STEREO Front ..... 80 W + 80 W
SURROUND Front ..... 60 W + 60 W
Center ..... 60 W
Rear ..... 60 W + 60 W

Input (Sensitivity/Impedance)
PHONO MM ..... 2.8 mV/47 kΩ
LD/SAT, CD, VCR/TAPE 1, TAPE 2
DVD/TV, VIDEO ..... 200 mV/47 kΩ
Phono Overload Level (T.H.D. 0.1 %, 1kHz)
PHONO MM ..... 100 mV
Frequency Response
PHONO MM ..... 20 Hz to 20,000 Hz ± 0.5 dB
LD/SAT, CD, VCR/TAPE 1, TAPE 2
DVD/TV, VIDEO ..... 5 Hz to 100,000 Hz $^{+0}_{-3}$ dB
Output (Level/Impedance)
VCR/TAPE 1 REC, TAPE 2 REC ..... 200 mV/1 kΩ
Tone Control
BASS ..... ± 9 dB (100 Hz)
TREBLE ..... ± 9 dB (10 kHz)
Signal-to-Noise Ratio [DIN (Continuous power output/50 mW)]*
PHONO MM ..... 67 dB/61 dB
LD/SAT, CD, VCR/TAPE 1, TAPE 2
DVD/TV, VIDEO ..... 82 dB/62 dB

* *Direct: ON*
** *Measured by Audio Spectrum Analyzer.*

VIDEO Section

Input (Sensitivity/Impedance)
LD/SAT, VCR, DVD/TV, VIDEO ..... 1 Vp-p/75 Ω
Output (Level/Impedance)
VCR REC, MONITOR TV ..... 1 Vp-p/75 Ω
Frequency Response
LD/SAT, VCR, DVD/TV, VIDEO
→ MONITOR ..... 5 Hz to 7 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio ..... 55 dB
Cross Talk ..... 55 dB

FM Tuner Section

Frequency Range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... Mono: 14.2 dBf, IHF (1.4 µV/75 Ω)
50 dB Quieting Sensitivity ..... Mono: 18 dBf
Stereo: 38.3 dBf
Signal-to-Noise Ratio ..... Mono: 76 dB (at 85 dBf)
Stereo: 72 dB (at 85 dBf)
Distortion ..... Stereo: 0.6 % (1kHz)
Alternate Channel Selectivity ..... 70 dB (400 kHz)
Stereo Separation ..... 40 dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz (± 1) dB
Antenna Input ..... 75 Ω unbalanced
Sensitivity (DIN) ..... Mono: 1.0 µV (S/N 26 dB)
Stereo: 50 µV (S/N 46 dB)
Signal-to-Noise Ratio (DIN) ..... Mono: 62 dB
Stereo: 58 dB

AM Tuner Section

Frequency Range ..... 531 kHz to 1,602 kHz
Sensitivity (IHF, Loop antenna) ..... 350 µV/m
Selectivity ..... 30 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... Loop antenna

Miscellaneous

Power Requirements ..... AC 220-230 V, 50/60 Hz
Power Consumption ..... 320 W
Power Consumption in standby mode 2W
Dimensions ..... 420 (W) × 158 (H) × 435 (D) mm
Weight (without package) ..... 12.0 kg

Furnished Parts

FM Antenna 1
AM Loop Antenna 1
Dry Cell Batteries [size "AA" (IEC R6)] 2
Remote Control Unit 1
Operating Instructions 1
Warranty card 1

NOTE:
Specifications and the design are subject to possible modifications without notice, due to improvements.

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